

IN THE CLAIMS:

Please amend Claims 1, 8, 15, 22, 29-32, 36 and 39 as shown.

Please add new Claims 51-62 to the application.

The following is a complete listing of claims and replaces all prior versions and listings of claims in the present application:

1. (Currently amended) A method of finding, in response to entry by a user of a user input recognized as a resource identity signifier, a single, intended target resource intended by the user to uniquely correspond to the resource identity signifier, among a plurality of resources available on a network comprising a plurality of interconnected computers, the method for use on a finder server having access to: (a) a database storing database information including (i) an index of the available resources; and (ii) multi-user feedback gathered from a plurality of users ~~in~~ with respect to the results of previous executions of the method; and (b) a learning system structured to access and learn from the database information, the method comprising the steps of:

receiving a user input;

recognizing the user input as a resource identity signifier ~~from the user~~; and

accessing the database to determine, based on the database information including the multi-user feedback, which, if any, of the indexed resources is likely to be the intended target resource based on the recognized resource identity signifier.

2. (canceled)

3. (original) A method according to Claim 1, wherein a resource is determined, at the accessing step, as likely to be the intended target resource if the database information indicates that a confidence level associated with that resource is of at least a predetermined level.

4. (previously presented) A method according to Claim 3, wherein, if none of the indexed resources has an associated confidence level of at least the predetermined level, the method further comprises the step of:

presenting the user with a list of one or more links to possible resources, the list being ordered according to confidence level, with a resource having a highest confidence level being ranked highest.

5. (previously presented) A method according to Claim 3, wherein the method further comprises the steps of:

in a first user interface element:

causing a computer of the user to connect to a URL of an indexed resource having a highest confidence level; and

in a second user interface element:

presenting the user with a list of one or more links to possible resources, the

list being ordered according to confidence level, with a resource having a highest confidence level being ranked highest.

6. (previously presented) A method according to Claim 4, further comprising the steps of:

selecting a link from the list of one or more links;

adding information regarding the selection of the link to the feedback information stored in the database;

soliciting user feedback with regard to the selected link; and,

if the user indicates that the selected link is the intended target resource of the resource identity signifier, updating the database information so as to increase the confidence level associated with a mapping between the resource identity signifier and an address of the selected link, and, if the user indicates that the selected link is not the intended target resource of the resource identity signifier, updating the database information so as to decrease the confidence level associated with the mapping between the resource identity signifier and the address of the selected link.

7. (previously presented) A method according to Claim 43, further comprising the steps of:

soliciting user feedback with regard to the determined intended target resource to which the user's computer was connected in the directing step; and,

if the user indicates that the determined intended target resource to which the user's computer was connected is the intended target resource of the resource identity signifier, updating the database information so as to increase a confidence level associated with a mapping between the resource identity signifier and an address of the determined intended target resource to which the user's computer was connected, and, if the user indicates that the resource to which the user's computer was connected is not the intended target resource of the resource identity signifier, updating the database information so as to decrease the confidence level associated with the mapping between the resource identity signifier and the address of the determined intended target resource to which the user's computer was connected.

8. (Currently amended) An apparatus comprising a finder server having access to:

(a) a database storing database information including:

(i) an index of a plurality of resources available on a network of interconnected computers on which a plurality of resources reside; and

(ii) multi-user feedback gathered from a plurality of users in with respect to the results of previous operations of the apparatus; and

(b) a learning system operable to access and learn from the database information,

wherein the finder server is operable to locate, in response to entry by the user of a user input recognized as a resource identity signifier, a single, intended target resource

intended by the user to uniquely correspond to the resource identity signifier, among the available resources, by:

receiving a user input;

recognizing the user input as a resource identity signifier ~~from the user~~; and

accessing the database to determine, based on the database information

including the multi-user feedback, which, if any, of the indexed resources is likely to be the intended target resource based on the recognized resource identity signifier.

9. (canceled)

10. (previously presented) An apparatus according to Claim 8, wherein a resource is determined to be the intended target resource if the database information indicates that a confidence level associated with that resource is of at least a predetermined level.

11. (previously presented) An apparatus according to Claim 10, wherein the apparatus is operable to, if none of the indexed resources has an associated confidence level of at least the predetermined level, present the user with a list of one or more links to possible resources, the list being ordered according to confidence level, with a resource having a highest confidence level being ranked highest.

12. (previously presented) An apparatus according to Claim 10, wherein the

apparatus is further operable to:

in a first user interface element:

cause a computer of the user to connect to a URL of an indexed resource

having a highest confidence level; and

in a second user interface element:

present the user with a list of one or more links to possible resources, the list

being ordered according to confidence level, with a resource having a highest confidence level

being ranked highest.

13. (previously presented) An apparatus according to Claim 11, wherein the apparatus is operable to:

select a link from the list of one or more links;

add information regarding the selection of the link to the feedback information stored in the database;

solicit user feedback with regard to the selected link; and,

if the user indicates that the selected link is the intended target resource of the resource identity signifier, updating the database information so as to increase the confidence level associated with a mapping between the resource identity signifier and an address of the selected link, and, if the user indicates that the selected link is not the intended target resource of the resource identity signifier, updating the database information so as to decrease the confidence level associated with the mapping between the resource identity signifier and the address of the

selected link.

14. (previously presented) An apparatus according to Claim 45, wherein the apparatus is further operable to:

solicit user feedback with regard to the determined intended target resource to which the user's computer was connected; and,

if the user indicates that the determined intended target resource to which the user's computer was connected is the intended target resource of the resource identity signifier, updating the database information so as to increase a confidence level associated with a mapping between the resource identity signifier and an address of the determined intended target resource to which the user's computer was connected, and, if the user indicates that the determined intended target resource to which the user's computer was connected is not the intended target resource of the resource identity signifier, updating the database information so as to decrease the confidence level associated with the mapping between the resource identity signifier and the address of the determined intended target resource to which the user's computer was connected.

15. (Currently amended) A system for finding, in response to entry by a user of a user input recognized as a resource identity signifier, a single, intended target resource intended by the user to uniquely correspond to the resource identity signifier, among a plurality of resources available on a network comprising a plurality of interconnected computers, the system comprising:

finder server means having access to: (a) database means for storing database information including an index of the available resources and multi-user feedback gathered from a plurality of users in with respect to the results of previous executions of the system; and (b) learning system means for accessing and learning from the database information;

receiving means for receiving a user input;

recognizing means for recognizing the user input as a resource identity signifier ~~from the user~~; and

accessing means for accessing the database means to determine, based on the database information including the multi-user feedback, which, if any, of the indexed resources is likely to be the intended target resource based on the recognized resource identity signifier.

16. (canceled)

17. (original) A system according to Claim 15, wherein a resource is determined, by the access means, as likely to be the intended target resource if the database information indicates that a confidence level associated with that resource is of at least a predetermined level.

18. (previously presented) A system according to Claim 17, further comprising:

presenting means for, if none of the indexed resources has an associated



confidence level of at least the predetermined level, presenting the user with a list of one or more links to possible resources, the list being ordered according to confidence level, with a resource having a highest confidence level being ranked highest.

19. (previously presented) A system according to Claim 17, further comprising:

means for, in a first user interface element, causing a computer of the user to connect to a URL of an indexed resource having a highest confidence level; and

means for, in a second user interface element, presenting the user with a list of one or more links to possible resources, the list being ordered according to confidence level, with a resource having a highest confidence level being ranked highest

20. (previously presented) A system according to Claim 18, further comprising:

selection means for selecting a link from the list of one or more links;

adding means for adding information regarding the selection of the link to the feedback information stored in the database;

soliciting means for soliciting user feedback with regard to the selected link;

and

means for, if the user indicates that the selected link is the intended target resource of the resource identity signifier, updating the database information so as to increase the

confidence level associated with a mapping between the resource identity signifier and an address of the selected link, and, if the user indicates that the selected link is not the intended target resource of the resource identity signifier, updating the database information so as to decrease the confidence level associated with the mapping between the resource identity signifier and the address of the selected link.

21. (previously presented): A system according to Claim 47, further comprising:

soliciting means for soliciting user feedback with regard to the determined intended target resource to which the user's computer was connected by the control means; and

means for, if the user indicates that the determined intended target resource to which the user's computer was connected is the intended target resource of the resource identity signifier, updating the database information so as to increase a confidence level associated with a mapping between the resource identity signifier and an address of the determined intended target resource to which the user's computer was connected, and, if the user indicates that the determined intended target resource to which the user's computer was connected is not the intended target resource of the resource identity signifier, updating the database information so as to decrease the confidence level associated with the mapping between the resource identity signifier and the address of the determined intended target resource to which the user's computer was connected.

22. (Currently amended): A computer-readable storage medium storing code for causing a processor-controlled finder server, which has access to: (a) a database storing database information including (i) an index of a plurality of resources available on a network of interconnected computers on which a plurality of resources reside; and (ii) multi-user feedback gathered from a plurality of users in with respect to the results of previous operations of the finder server; and (b) a learning system structured to access and learn from the database information, to perform a method of finding, in response to entry by the user of a user input recognized as a resource identity signifier, a single, intended target resource intended by the user to uniquely correspond to the resource identity signifier, among the available resources, the method comprising the steps of:

receiving a user input;

recognizing the user input as a resource identity signifier ~~from the user~~; and

accessing the database to determine, based on the database information including the multi-user feedback, which, if any, of the indexed resources is likely to be the intended target resource based on the recognized resource identity signifier.

23. (canceled)

24. (original): A computer-readable medium according to Claim 22, wherein a resource is determined, in the accessing step, as likely to be the intended target resource if the database information indicates that a confidence level associated with that resource is of at least a

predetermined level.

25. (previously presented): A computer-readable medium according to Claim 24, wherein, if none of the indexed resources has an associated confidence level of at least the predetermined level, the method further comprises the step of:

presenting the user with a list of one or more links to possible resources, the list being ordered according to confidence level, with a resource having a highest confidence level being ranked highest.

26. (previously presented): A computer-readable medium according to Claim 24, wherein the method further comprises the steps of:

in a first user interface element:

causing a computer of the user to connect to a URL of an indexed resource having a highest confidence level; and

in a second user interface element:

presenting the user with a list of one or more links to possible resources, the list being ordered according to confidence level, with a resource having a highest confidence level being ranked highest.

27. (previously presented): A computer-readable medium according to Claim 25, wherein the method further comprises the steps of:

selecting a link from the list of one or more links;  
adding information regarding the selection of the link to the feedback  
information stored in the database;  
soliciting user feedback with regard to the selected link; and,  
if the user indicates that the selected link is the intended target resource of the  
resource identity signifier, updating the database information so as to increase the confidence  
level associated with a mapping between the resource identity signifier and an address of the  
selected link, and, if the user indicates that the selected link is not the intended target resource of  
the resource identity signifier, updating the database information so as to decrease the confidence  
level associated with the mapping between the resource identity signifier and the address of the  
selected link.

28. (previously presented): A computer-readable medium according to Claim  
49, wherein the method further comprises the steps of:

soliciting user feedback with regard to the determined intended target resource  
to which the user's computer was connected; and,

if the user indicates that the determined intended target resource to which the  
user's computer was connected is the intended target resource of the resource identity signifier,  
updating the database information so as to increase a confidence level associated with a mapping  
between the resource identity signifier and an address of the determined intended target resource  
to which the user's computer was connected, and, if the user indicates that the determined

intended target resource to which the user's computer was connected is not the intended target resource of the resource identity signifier, updating the database information so as to decrease the confidence level associated with the mapping between the resource identity signifier and the address of the determined intended target resource to which the user's computer was connected.

29. (Currently amended): A system for finding resources on a network of interconnected computers on which a plurality of resources reside, the system comprising:

a client terminal operated by a user, the client terminal allowing the user to connect to resources located on the network; and

a finder server having access to:

(a) a database storing database information including: (i) an index of a plurality of resources available on the network; and (ii) multi-user feedback gathered from a plurality of users in with respect to the results of previous operations of the system; and

(b) a learning system operable to access and learn from the database information,

wherein the finder server is operable to locate, in response to entry by the user of a user input recognized as a resource identity signifier, a single, intended target resource intended by the user to uniquely correspond to the resource identity signifier, among the available resources:

receiving a user input;

recognizing the user input as a resource identity signifier~~from the user~~;  
accessing the database to determine, based on the database information  
including the multi-user feedback, which, if any, of the indexed resources is likely to be the  
intended target resource based on the recognized resource identity signifier; and  
directing a computer of the user so as to cause that computer to connect the  
user to an address of a resource, if any, determined as likely to be the intended target resource.

30. (Currently amended): A method of identifying, in response to entry by a  
user of a user input recognized as an object identity signifier, a single, intended object to be acted  
upon, wherein the single, intended object to be acted upon is intended by the user to uniquely  
correspond to the object identity signifier, among a plurality of possible objects, wherein the  
method utilizes a computer having access to: (a) a database storing database information  
including (i) an index of the possible objects; and (ii) multi-user feedback gathered from a  
plurality of users in with respect to the results of previous executions of the method; and (b) a  
learning system structured to access and learn from the database information, and wherein the  
method comprises the steps of:

receiving a user input;  
recognizing the user input as an object identity signifier~~from the user~~; and  
accessing the database to determine, based upon the database information  
including the multi-user feedback, which, if any, of the indexed objects is likely to be the  
intended object to be acted upon based upon the recognized object identity signifier.

31. (Currently amended): An apparatus for identifying, in response to entry by a user of a user input recognized as an object identity signifier, a single, intended object to be acted upon, wherein the single, intended object to be acted upon is intended by the user to uniquely correspond to the object identity signifier, among a plurality of possible objects, the apparatus comprising:

a computer having access to:

(a) a database storing database information including (i) an index of the possible objects; and (ii) multi-user feedback gathered from a plurality of users in with respect to the results of previous operations of the apparatus; and

(b) a learning system structured to access and learn from the database information,

wherein the apparatus is operable to:

receive a user input;

recognize the user input as an object identity signifier ~~from the user~~; and

access the database to determine, based upon the database information including the multi-user feedback, which, if any, of the indexed objects is likely to be the intended object to be acted upon based on the recognized object identity signifier.

32. (Currently amended): A method of finding a single, intended target resource among a plurality of resources available on a network, the method comprising the steps of:



obtaining a user input;  
recognizing the user input as a user-provided resource identity signifier; and  
utilizing feedback information stored in a database to determine a resource  
likely to be the single, intended target resource based on the recognized resource identity  
signifier.

33. (previously presented): A method according to Claim 32, wherein the  
feedback information is gathered from a plurality of previous users of the method.

34. (previously presented): A method according to Claim 32, further  
comprising the step of obtaining feedback from the user regarding the resource determined in the  
utilizing step.

35. (previously presented): A method according to Claim 34, wherein the  
feedback information stored in the database is updated with the feedback obtained from the user.

36. (Currently amended): An apparatus for finding a single, intended target  
resource among a plurality of resources available on a network, the apparatus comprising:  
input means for enabling a user to enter a user input;  
recognizing means for recognizing the user input as a resource identity  
signifier; and

determination means for using feedback information stored in a database to determine a resource likely to be the single, intended target resource based on the recognized resource identity signifier.

37. (previously presented): An apparatus according to Claim 36, wherein the feedback information is gathered from a plurality of previous users of the method.

38. (previously presented): An apparatus according to Claim 36, further comprising update means for updating the feedback information stored in the database with feedback obtained from the user regarding the resource determined by the determination means.

39. (Currently amended): A computer-readable storage medium storing a program for implementing a method of finding a single, intended target resource among a plurality of resources available on a network, the method comprising the steps of:

prompting a user to enter a user input;

recognizing the user input as a resource identity signifier; and

utilizing feedback information stored in a database to determine a resource likely to be the single, intended target resource based on the recognized resource identity signifier.

40. (previously presented): A computer-readable medium according to Claim

39, wherein the feedback information is gathered from a plurality of previous users of the method.

41. (previously presented): A computer-readable medium according to Claim 39, wherein the method further comprises the step of obtaining feedback from the user regarding the resource determined in the utilizing step.

42. (previously presented): A computer-readable medium according to Claim 41, wherein the feedback information stored in the database is updated with the feedback obtained from the user.

43. (previously presented): A method according to Claim 1, further comprising the step of causing a computer of the user to connect to the determined intended target resource, if any.

44. (previously presented): A method according to Claim 1, further comprising the step of causing a computer of the user to display the determined intended target resource, if any.

45. (previously presented): An apparatus according to Claim 8, wherein the finder server is further operable to cause a computer of the user to connect to the determined

intended target resource, if any.

46. (previously presented): An apparatus according to Claim 8, wherein the finder server is further operable to cause a computer of the user to display the determined intended target resource, if any.

47. (previously presented): A system according to Claim 15, further comprising control means for causing a computer of the user to connect to the determined intended target resource, if any.

48. (previously presented): A system according to Claim 15, further comprising control means for causing a computer of the user to display the determined intended target resource, if any.

49. (previously presented): A computer-readable medium according to Claim 22, wherein the method further comprises the step of causing a computer of the user to connect to the determined intended target resource, if any.

50. (previously presented): A computer-readable medium according to Claim 22, wherein the method further comprises the step of causing a computer of the user to display the determined intended target resource, if any.

51. (new): A method of finding a single, intended target resource among a plurality of resources available on the Internet, the method comprising the steps of:

- obtaining a user input;
- recognizing the user input as a resource identity signifier; and
- utilizing multi-user feedback information stored in a database, to determine a resource likely to be the single, intended target resource based on the recognized resource identity signifier, the feedback information relating to a result of the method.

52. (new): A method according to Claim 51, wherein the multi-user feedback information is obtained from the a result of a system inquiry of a user.

53. (new): A method according to Claim 51, wherein the multi-user feedback information is obtained from clickstream data.

54. (new): An apparatus for finding a single, intended target resource among a plurality of resources available on the Internet, the apparatus comprising:

- input means for enabling a user to enter a user input;
- recognizing means for recognizing the user input as a resource identity signifier; and
- determination means for using multi-user feedback information stored in a database, to determine a resource likely to be the single, intended target resource based on the

recognized resource identity signifier, the feedback information relating to a result of the operation of the apparatus.

55. (new): An apparatus according to Claim 54, wherein the multi-user feedback information is obtained from a result of a system inquiry of a user.

56. (new): An apparatus according to Claim 54, wherein the multi-user feedback information is obtained from clickstream data.

57. (new): A computer-readable storage medium storing a program for implementing a method of finding a single, intended target resource among a plurality of resources available on the Internet, the method comprising the steps of:

prompting a user to enter a user input;

recognizing the user input as a resource identity signifier; and

utilizing multi-user feedback information stored in a database, to determine a resource likely to be the single, intended target resource based on the recognized resource identity signifier, the feedback information relating to a result of the method.

58. (new): A medium according to Claim 57, wherein the multi-user feedback information is obtained from a result of a system inquiry of a user.

59. (new): A medium according to Claim 57, wherein the multi-user feedback information is obtained from clickstream data.

60. (new): A method of finding a single, intended target resource among a plurality of resources available on the Internet, the method comprising the steps of:

obtaining a user input;

recognizing the user input as a resource identity signifier, wherein the resource identity signifier does not include a URL or portion thereof; and

utilizing multi-user feedback information stored in a database to determine a resource likely to be the single, intended target resource based on the recognized resource identity signifier.

61. (new): An apparatus for finding a single, intended target resource among a plurality of resources available on the Internet, the apparatus comprising:

input means for enabling a user to enter a user input;

recognizing means for recognizing the user input as a resource identity signifier, wherein the resource identity signifier does not include a URL or portion thereof; and

determination means for using multi-user feedback information stored in a database, to determine a resource likely to be the single, intended target resource based on the recognized resource identity signifier.

62. (new): A computer-readable storage medium storing a program for implementing a method of finding a single, intended target resource among a plurality of resources available on the Internet, the method comprising the steps of:

- prompting a user to enter a user input;
- recognizing the user input as a resource identity signifier, wherein the resource identity signifier does not include a URL or portion thereof; and
- utilizing multi-user feedback information stored in a database, to determine a resource likely to be the single, intended target resource based on the recognized resource identity signifier.